

# Spill Prevention Control and Countermeasure Plan

## HOLNAM

**Holnam Incorporated  
Cement Manufacturing Plant  
Seattle, Washington**

June 1996

Prepared by:



**vasey engineering**

USEPA SF



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**SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN  
HOLNAM, INCORPORATED  
SEATTLE, WASHINGTON FACILITY**

RECEIVED  
AUG 06 1997  
DEPT. OF ECOLOGY

**Holnam, Incorporated  
Seattle, Washington**

**June 6, 1996**

**revised: June 13, 1997**

cf: Plant File  
Plant Manager  
Plant Environmental Manager  
Plant Control Room  
Holnam Corporate Environmental Department  
Washington Department of Ecology  
Tacoma Environmental Sciences Incorporated  
Preston, Gates, & Ellis  
Waste Action Project

# SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN CERTIFICATION AND APPROVAL

## Certification Information

- a. Name of facility: Holnam, Incorporated
- b. Type of facility: Portland cement manufacturing
- c. Date of initial operation: 1967
- d. Location of facility: 5400 West Marginal Way SW  
Seattle, WA 98106
- e. Name and address of owner: Holnam, Incorporated  
6211 N. Ann Arbor Road  
P.O. Box 122  
Dundee, MI 48131
- f. Designated person responsible for oil spill prevention:  
Nick F. Stiren, Plant Manager
- g. Oil spill history: This facility has experienced no reportable oil spills as of the date of approval and certification of this plan.
- h. Management approval: Full approval is extended by Management at a level with authority to commit the necessary resources toward spill prevention.

SIGNATURE: \_\_\_\_\_

Nick F. Stiren, Plant Manager

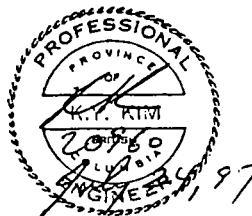
## Certification

I hereby certify that I have examined the facility and, being familiar with the provisions of 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

SIGNATURE: \_\_\_\_\_

Ken Kim, Plant Engineer

(SEAL)



Signature of Registered Professional Engineer

Date: July 24, 1997

Registration No.: 20960

State: British Columbia

## TABLE OF CONTENTS

SECTION	TITLE	PAGE
	<b>Spill Prevention Control and Countermeasure Plan Certification and Approval</b>	
1.0	<b>Introduction</b>	<b>1</b>
2.0	<b>Plant Facilities and Operation</b>	<b>2</b>
2.1	<i>Description</i>	2
2.2	<i>Operations</i>	2
2.3	<i>Storage and Handling</i>	2
2.4	<i>Drainage</i>	3
2.5	<i>Transformers</i>	3
2.6	<i>Security</i>	4
3.0	<b>Spill Prevention and Control</b>	<b>5</b>
3.1	<i>General</i>	5
3.2	<i>Containment and Spill Analysis</i>	5
3.3	<i>Training</i>	6
3.4	<i>Inspections and Records</i>	7
4.0	<b>Response To Spills and Emergencies</b>	<b>8</b>
4.1	<i>Policy</i>	8
4.2	<i>Emergency Response Plan</i>	8
4.3	<i>Emergency Coordinator</i>	8
4.4	<i>Plant Communications</i>	9
4.5	<i>Emergency Equipment and Systems</i>	9
5.0	<b>SPCC Plan Administration and Amendment</b>	<b>10</b>
<b>TABLES</b>		
1.	Oils and Chemicals Used On Site	11
2.	Storage Tanks and Facilities	12
3.	Best Management Practices	13
<b>DRAWINGS</b>		
	Site Plan	
	Drainage Plan	
	Runoff Plan	
<b>APPENDICES</b>		
A.	Emergency Response Plan	
B.	Inspection and Reporting Forms	
C.	Plan Revisions	

# **SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN HOLNAM, INC. - SEATTLE**

## **1.0 Introduction**

This document is prepared in accordance with Title 40, Code of Federal Regulations (40CFR), Part 112, which requires that facilities subject to the regulation prepare and implement a plan to prevent any discharge of oil into waters of the United States. This plan also complies with WAC 173-303, Dangerous Waste Regulations, and incorporates the requirements of National Pollution Discharge Elimination (NPDES) Permit No. WA-000223-2 issued on June 16, 1997, by the Washington State Department of Ecology (WDOE). This permit specifically requires this plan to address the prevention, containment, and control of spills or unplanned discharges of the following materials, in addition to oil and petroleum products:

- a. Materials, which when spilled or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or
- b. Other materials which may become pollutants or cause pollution upon reaching state's waters.

The plan is formulated to minimize the potential for emergency incidents through proper operating procedures, personnel training, and comprehensive supervision. Additionally, the plan presents response procedures and contingency actions to minimize hazards to human health and safety and environmental impacts in case of such an incident. Removal and disposal of spilled materials are also addressed.

## **2.0 Plant Facilities and Operations**

### **2.1 *Description***

The Holnam Seattle plant is located at 5400 West Marginal Way Southwest, Seattle, Washington. The plant occupies approximately nineteen acres and adjoins the Duwamish River Waterway along the east and north boundaries. The facility has been in operation since 1967, manufacturing Portland cement in a single wet process kiln. The plant has the capacity to produce 490,000 tons of cement annually, operating continuously 24 hours per day throughout the year except for short periods of shutdown for scheduled maintenance and repairs.

### **2.2 *Operations***

The manufacturing of Portland cement involves the combining and processing of various raw materials. Primary operations include storage, handling, mixing, heating, and grinding. The plant receives and stores bulk raw materials for use in the manufacturing process and various materials for plant fuel. The on-site movement of these materials is by wheeled loader, truck, liquid and gas pipeline, and mechanical and pneumatic conveyor. Raw materials used in cement production are limestone, sand, clay, iron ore or iron-bearing products, natural soils and gravel, fly ash, boiler slags, lime, gypsum, or other feed materials containing calcium, silica, iron and alumina. Petroleum-contaminated soil and gravel and other granular waste materials are also used. No material regulated as a hazardous waste under the Boiler and Industrial Furnace, Resource Conservation and Recovery Act (RCRA), or Toxic Substance Control Act (TSCA) regulations is accepted as a feed material or fuel. Fuels used include coke, coal, tire-derived fuel (TDF), natural gas, Stericycle Sterifuel (permitted for but not currently using), and oils which include but are not limited to: diesel, used oil; crudes, and tank bottom oil (TBO). The plant uses up to 240,000 gallons of water per day in all operations. Portland cement and associated finished products are shipped off site by truck, railcar, and barge.

### **2.3 *Storage and Handling***

Petroleum products, fuel, and production raw materials are stored at various locations in contained areas shown on the Site Plan. Detailed descriptions of storage and containment facilities are provided in paragraph 3.2, Containment and Spill Analysis. Oils and chemicals used on site are listed in Table 1. Petroleum products storage and handling facilities are listed and described in Table 2. The waste water storage tank is included in this table because petroleum-contaminated water is often stored in this tank for use in the production process. Waste oil and supplies of lubricants, oils, solvents, thinners, and paints are stored in a room with an undrained recessed concrete floor in the Service Building. Waste thinner, solvent, grease, rags and drained oil filters are stored in separate labeled steel

drums in an adjacent area with a concrete floor in the same building. Waste materials are handled and stored according to the requirements of WAC 173-303 and are removed from the site by certified contractors. The various raw materials are delivered by truck, barge, and railcar, and are unloaded at specifically designed facilities. Granular raw materials are stockpiled in designated areas (see Site Plan) with protection to minimize contamination from rain runoff, including overhead cover for some stockpiles. Liquid grinding aids are stored in steel tanks adjacent to the mill building. Portland cement and associated products are stored in concrete silos and loaded from facilities specifically designed for each transportation mode. Petroleum tank trucks are unloaded under the constant supervision of the truck driver. Wheel checks are utilized, and hoses are detached and stored prior to truck departure. Warning signs and instructions are posted at unloading areas. All loading and unloading operations are conducted according to the requirements established by the Department of Transportation.

#### 2.4 *Drainage*

The entire site is paved in concrete except for a small open gravel area just north of the main entry gate and curbed landscaped areas south and west of the gate. The site has been divided into seven drainage basins as shown on the Drainage Plan. The basins are defined by pavement slopes and structures which control stormwater runoff movement to existing collection facilities within each basin. Basins 1, 4, 5, 6, and 8 are recycled via pump stations upstream of outfalls 1, 4, and 8. Outfalls 1, 4, and 8 discharge to the Duwamish River only when runoff exceeds the capacity of the installed systems for recycling the stormwater for use in the manufacturing process. No underground collection facilities are provided within Basin 9. Runoff to the north from Basin 9 flows overland off the pavement edge into a limestone cap. Runoff from Basin 10 is collected and used in the cement manufacturing process. Basins and discharge points (outfalls) are shown on the Drainage Plan, and general directions of stormwater runoff flow are shown on the Runoff Plan. Stormwater confined by structural site features (containment structures, undrained surface areas and the outside raw storage area) is used in the production process in lieu of discharge.

#### 2.5 *Transformers*

The main substation transformer owned by Seattle City Light is contained within a locked compound near the main entry gate. Fifteen smaller substation transformers are located throughout the plant as shown on the Site Plan. There are no polychlorinated-biphenyls (PCB) transformers.

## 2.6 *Security*

The plant perimeter is completely fenced except for the dock area along the Duwamish River eastern boundary. All entry gates are locked except during daytime business hours when entry is monitored by personnel working in the vicinity. The plant is staffed continuously. Exterior transformer areas are enclosed within a locked fence. All valves for outside storage tanks are locked closed when not in use. Pump controls for fueling facilities and storage tanks are locked when not in use and are located in areas accessible only to authorized personnel. Plant lighting is designed to provide safe working conditions and permit observation and inspection of material storage areas and machinery. Security facilities and procedures are in compliance with WAC 173-303-310.